

SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES

The goals of the Directorate for Social, Behavioral, and Economic Sciences (SBE) are to develop basic scientific knowledge of human social behavior, interaction, and decisionmaking and of social and economic systems, organizations, and institutions; to collect, analyze, and publish data on the status of the Nation's science and engineering human, institutional, and financial resources; and to advance the U.S. science and engineering enterprise by promoting international partnerships and by enhancing the work of U.S. researchers through cooperative activities with foreign scientists and engineers and their facilities and institutions.

The Directorate for Social, Behavioral, and Economic Sciences supports programs and activities through the following:

- **Crosscutting Programs and Activities**
- **Division of Behavioral and Cognitive Sciences (BCS)**
- **Division of Social and Economic Sciences (SES)**
- **Division of Science Resources Statistics (SRS)**
- **Division of International Programs (INT)**

For More Information

Visit the SBE Directorate home page, <http://www.nsf.gov/sbe/>.

CROSSCUTTING PROGRAMS AND ACTIVITIES

In addition to supporting the programs and activities within the Directorate for Social, Behavioral, and Economic Sciences (SBE), SBE also takes an active role in the following crosscutting programs and activities:

- **Priority Areas**
 - Information Technology Research
 - Biocomplexity in the Environment
 - Learning for the 21st Century
- **National Science and Technology Council Crosscuts**
 - High Performance Computing and Communications and Information Technology
 - U.S. Global Change Research

For More Information

Visit the NSF Crosscutting Programs home page, <http://www.nsf.gov/home/crssprgm/>.

DIVISION OF BEHAVIORAL AND COGNITIVE SCIENCES

Research support is available in the Division of Behavioral and Cognitive Sciences (BCS) through the following clusters of programs:

- **Anthropological and Geographic Sciences Cluster**
- **Cognitive, Psychological, and Language Sciences Cluster**

Submission of Proposals to the BCS Division

All programs in the BCS Division consider proposals for research projects, conferences, and workshops. Some programs also consider proposals for doctoral dissertation improvement, the acquisition of specialized research and computing equipment, and large-scale data collection.

BCS conducts special initiatives and competitions on a number of topics such as cognitive neuroscience; children's research; human origins; environmental, social, and behavioral sciences; and integrative graduate education and research training.

For More Information

Write to the responsible program director, Division of Behavioral and Cognitive Sciences, National Science Foundation, 4201 Wilson Boulevard, Room 995, Arlington, VA 22230; or contact by telephone, 703-292-8740; or visit the BCS home page, <http://www.nsf.gov/sbe/bcs/start.htm>.

ANTHROPOLOGICAL AND GEOGRAPHIC SCIENCES CLUSTER

This cluster of programs is within the Division of Behavioral and Cognitive Sciences (BCS) and is composed of the following:

1. **Archaeology and Archaeometry**
2. **Cultural Anthropology**

3. **Geography and Regional Science**
4. **Physical Anthropology**

i For More Information

Visit the BCS Division home page,
<http://www.nsf.gov/sbe/bcs/start.htm>.

1. Archaeology and Archaeometry—Supports archaeological research that contributes to an anthropological understanding of the past. Both fieldwork and nonfieldwork are eligible for support. Through a special archaeometry competition, the program provides support for projects that conduct archaeometric work of anthropological significance and that develop archaeometric techniques.

2. Cultural Anthropology—Supports basic research on the causes and consequences of crosscultural and intracultural variation as such research broadens or refines anthropological theory. In an effort to enhance the quality of students' field research in graduate programs, the program offers Ethnographic Research Training Awards. Scholars' Awards in Methodological Training for Cultural Anthropologists are offered for senior researchers who wish to upgrade their research skills by learning a particular analytical technique.

3. Geography and Regional Science—Supports basic research on the causes and consequences of geographical differences in economic, social, cultural, and physical phenomena, including interactions among places and regions and interrelations between human activities and the natural environment. Projects on a variety of domestic and overseas topics that will

enhance geographical theory, geographical methods, and its applications qualify for support.

4. Physical Anthropology—Supports basic research in areas that relate to human evolution and contemporary human variation. Research areas supported by the program include human genetic variation, human adaptation, human osteology, human origins, human paleontology, primate functional anatomy, and primate behavior.

COGNITIVE, PSYCHOLOGICAL, AND LANGUAGE SCIENCES CLUSTER

This cluster of programs is within the Division of Behavioral and Cognitive Sciences (BCS) and is composed of the following:

1. **Developmental and Learning Sciences**
2. **Human Cognition and Perception**
3. **Linguistics**
4. **Social Psychology**
5. **Cognitive Neuroscience**

i For More Information

Visit the BCS Division home page,
<http://www.nsf.gov/sbe/bcs/start.htm>.

1. Developmental and Learning Sciences—Supports research on cognitive, social, and biological processes related to children and adolescent learning in formal and informal settings. Priorities are to support research on learning and development that incorporates multidisciplinary, multimethod, microgenetic, and longitudinal approaches; develops new methods and theories; examines transfer of knowledge from one domain to another; assesses peer relations, family interactions,

social identities, and motivation; examines the impact of family, school, and community resources; assesses adolescents' preparation for entry into the workforce; and investigates the role of culture in children's learning and development.

2. Human Cognition and Perception—

Supports research on human perceptual and cognitive processes, including the development of these processes. Emphasis is on research strongly grounded in theory. Research topics include vision, audition, haptic perception, attention, object recognition, language processing, spatial representation, motor control, memory, reasoning, and concept formation. The program encompasses a wide range of theoretical perspectives such as experimental computation, connectionism, and ecological perception and a variety of methodologies such as experimental studies and computational modeling. Research involving acquired or developmental deficits is appropriate if the results speak to basic issues in the study of normal perception or cognition.

3. Linguistics—Supports theoretically informed research on human language. The program encompasses a wide range of theoretical perspectives and a variety of methodologies, including experimental studies and computational modeling. Research topics include the properties of individual languages and of language in general; language acquisition; the psychological processes involved in the use of language; social and cultural factors in language use, variation, and change; acoustic, articulatory, and perceptual study of speech; and the biological bases of language in the central nervous system. Program awards have also supported the development of lexicons, corpora, databases, and other resources for the language sciences. In addition to regular research proposals, the program accepts proposals for doctoral dissertation research;

conferences, workshops, and symposia; group travel to international conferences; and Small Grants for Exploratory Research.

4. Social Psychology—Supports research on human social behavior, including cultural influences and life-span social development. Research topics include aggression; altruism; attitude formation and change; attitudes and behavior; attributional processes; emotion; environmental psychology; group decisionmaking, performance, and process; intergroup relations; interpersonal attraction and relations; nonverbal communication; person perception; personality processes; prejudice; the self; social comparison; social cognition; social influence; and stereotyping.

5. Cognitive Neuroscience—Supports neuroscientific research on cognitive, perceptual, linguistic, developmental, affective, and social processes, including developmental and computational modeling approaches. Priorities of the program are to support collaborative research and to enhance training at all levels of professional development.

DIVISION OF SOCIAL AND ECONOMIC SCIENCES

Research support is available in the Division of Social and Economic Sciences (SES) through the following clusters of programs:

- **Economic, Decision, and Management Sciences Cluster**
- **Methods, Cross-Directorate, and Science and Society Cluster**
- **Social and Political Sciences Cluster**

Submission of Proposals to the SES Division

All programs in the SES Division consider proposals for research projects, conferences, and workshops. Some programs also consider proposals for doctoral dissertation improvement, the acquisition of specialized research and computing equipment, and large-scale data collection.

SES conducts special initiatives and competitions on a number of topics such as human dimensions of global change, learning and intelligent systems, integrative graduate education and research training, and human capital.

For More Information

Write to the responsible program director, Division of Social and Economic Sciences, National Science Foundation, 4201 Wilson Boulevard, Room 99, Arlington, VA 22230; or contact by telephone, 703-292-8760; or visit the SES home page, <http://www.nsf.gov/sbe/ses/start.htm>.

ECONOMIC, DECISION, AND MANAGEMENT SCIENCES CLUSTER

This cluster of programs is within the Division of Social and Economic Sciences (SES) and consists of the following:

1. **Decision, Risk, and Management Science**
2. **Economics**
3. **Innovation and Organizational Change**

For More Information

Visit the SES Division home page, <http://www.nsf.gov/sbe/ses/start.htm>.

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1. Decision, Risk, and Management Science

—Supports scientific research directed at increasing the understanding and effectiveness of decisionmaking by individuals, groups, organizations, and society. Disciplinary and interdisciplinary research, doctoral dissertation research, and workshops are funded in the areas of judgment and decisionmaking; decision analysis and decision aids; risk analysis, perception, and communication; societal and public policy decisionmaking; and management science and organizational design. The program also supports small grants for exploratory research that are time-critical, such as decisionmaking in response to extreme events. Funded research must have implications in an operational or applied context, be grounded in theory, be based on empirical observation or subject to empirical validation, and be generalizable. The program conducts a special joint NSF/private-sector initiative, through which NSF funding is matched by contributions from private firms, to conduct basic research that is firmly grounded in real and practical contexts.

2. Economics—Supports basic scientific research designed to improve the understanding of the processes and institutions of the U.S. economy and of the world system of which it is a part. The program supports empirical and theoretical research as well as conferences in almost every subfield of economics, including econometrics, mathematical economics, labor economics, macroeconomics, industrial organization, international economics, public finance, and economic history. The program also supports interdisciplinary research and conferences that strengthen the connection between economics and other disciplines, including the other social sciences, statistics, mathematics, the behavioral sciences, and engineering.

3. Innovation and Organizational Change (IOC)—Seeks to improve the performance of industrial, educational, service, health care, government, and other organizations and institutions. Proposers work in partnership with organizations in these areas to perform research on theories, concepts, and methodologies of innovation and organizational change. The program supports research using theory combined with empirical validation to understand effective approaches to organizational learning and redesign, strategic change, and cultural change; quality and process improvement; innovation and change management; new product and service development; and the development and integration of new technologies.

Three NSF directorates jointly support the program: Social and Economic Sciences; Engineering; and Education and Human Resources. The IOC Program supersedes and extends the scope of two previous NSF programs: Management of Technological Innovation (MOTI) and Transformations to Quality Organizations (TQO).

METHODS, CROSS-DIRECTORATE, AND SCIENCE AND SOCIETY CLUSTER

This cluster of programs is within the Division of Social and Economic Sciences (SES) and is composed of the following:

- 1. Cross-Directorate Activities**
- 2. Methodology, Measurement, and Statistics**
- 3. Science and Technology Studies**
- 4. Societal Dimensions of Engineering, Science, and Technology: Ethics and Values Studies, Research on Science and Technology**

For More Information

Visit the SES Division home page, <http://www.nsf.gov/sbe/ses/start.htm>.

1. Cross-Directorate Activities—Provides information about various cross-directorate programs in which the Social, Behavioral, and Economic Sciences Directorate participates. For activities related to the social and behavioral sciences, the program administers the Research Experiences for Undergraduates Sites, ADVANCE Fellows, and Minority Postdoctoral Research Fellowships Programs. In addition, the program coordinates the Faculty Early Career Development, Presidential Early Career Awards for Scientists and Engineers, Research Opportunity Awards, Integrative Graduate Education and Research Traineeships, and Small Business Innovation Research Programs. Also in the areas of social and behavioral sciences, the program officers for Cross-Directorate Activities can provide information about special opportunities NSF offers for education initiatives. For a complete description of these programs, see the Crosscutting Investment Strategies section in this Guide.

For More Information

See Chapter 1, “Crosscutting Investment Strategies,” in this Guide; or visit the NSF Crosscutting Programs home page, <http://www.nsf.gov/home/crssprgm/start.htm>, or the SES Division home page, <http://www.nsf.gov/sbe/ses/ip>.

2. Methodology, Measurement, and Statistics—Supports fundamental research on the development, application, and extension of formal models and methodologies for social and behavioral

research, including methods for improving measurement, and research on statistical methodology or statistical modeling that has direct implications for one or more of the social and behavioral sciences. Also supported are research on methodological aspects of new or existing procedures for data collection; research to evaluate or compare existing databases and data collection procedures; the collection of unique databases with cross-disciplinary implications, especially when paired with developments in measurement or methodology; and the methodological infrastructure of social and behavioral research.

3. Science and Technology Studies—

Supports historical, philosophical, cognitive, and social research regarding the character and development of science and technology; the nature of theory and evidence in different fields; and the social and intellectual construction of science and technology. Support is also given to research that examines the relationship among science, government, and other social institutions and groups, and processes of scientific innovation and change.

4. Societal Dimensions of Engineering, Science, and Technology: Ethics and Values Studies, Research on Science and Technology—Includes Ethics and Values Studies (EVS) and Research on Science and Technology (RST). The EVS component focuses on improving knowledge about ethical and value dimensions in science, engineering, and technology. The RST component focuses on improving approaches and information for decisionmaking about investment in science, engineering, and technology.

SOCIAL AND POLITICAL SCIENCES CLUSTER

This cluster of programs is within the Division of Social and Economic Sciences (SES) and consists of the following:

- 1. Law and Social Science**
- 2. Political Science**
- 3. Sociology**

For More Information

Visit the SES Division home page,
<http://www.nsf.gov/sbe/ses/start.htm>.

1. Law and Social Science—Supports social science studies of law and lawlike systems of rule, institutions, processes, and behavior. These studies may include research designed to enhance the scientific understanding of the impact of law; human behavior and interaction as they relate to law; the dynamics of legal decision making; and the nature, source, and consequence of variation and change in legal institutions. The primary consideration is that the research shows promise of advancing the scientific understanding of law and legal process. Within this framework, the program has an “open window” for diverse theoretical perspectives, methods, and contexts for study.

2. Political Science—Supports scientific research that advances knowledge and understanding of citizenship, government, and politics. Research proposals are expected to be theoretically motivated, conceptually clear, methodologically rigorous, and empirically oriented. Substantive areas for research proposals include American government and politics, comparative government and politics, international relations, political behavior, political economy, and political institutions.

In recent years, program awards have supported research projects on bargaining processes; campaigns and elections, electoral choice, and electoral systems; citizen support in emerging and established democracies; democratization, political change, and regime transitions; domestic and international conflict; international political economy; party activism; political psychology and political tolerance. On occasion, program awards also have supported research experiences for undergraduate students, methodological advances in political science, and infrastructural improvements through conference activities.

3. Sociology—Supports scientific research on all forms of human social organization—societies, institutions, groups, and demography. The program encourages theoretically focused empirical investigations of social processes and social structures. It welcomes research that will build connections with other disciplines. Recent awards supported by the program include research on assimilation; crime and delinquency; democratization; education; family; gender; group processes; migration and immigration; organizations and organizational behavior; race and ethnic relations; religion; science and technology; social networks; social movements; stratification and mobility; voluntary organizations; and work and labor markets. The program also promotes doctoral research through Dissertation Improvement Grants (for more information on these grants, refer to the *NSF Grant Proposal Guide* [see <http://www.nsf.gov/cgi-bin/getpub?qpq> for latest version]).

DIVISION OF SCIENCE RESOURCES STATISTICS

The Division of Science Resources Statistics (SRS) provides statistical data on the science and engineering enterprise: education, workforce, research and development funding, and research facilities. The data enables policy-makers, researchers, and the public to better understand our Nation's science, engineering, and technology enterprise. SRS contracts for most of the data collection activities and some of the analyses that it handles.

The SRS Division encourages proposals for research, workshops, and studies that will lead to the development of new and improved science and technology (S&T) indicators and to an improved understanding of the S&T enterprise in the United States and globally. SRS also invites new approaches to the presentation of indicators that will both increase the understanding of S&T issues and permit more sophisticated techniques of statistical analysis and electronic display.

Proposal Submission

The SRS Division welcomes the submission of proposals to its programs in the topic areas mentioned in this Guide. For specific information and instructions on proposal submission, see the program announcement *Grants for the Analysis of Science and Technology Resources* (NSF 00-111). Proposals are due in mid-September. Awards are made in March of the following year.

SRS Documents

Using data from its surveys, the SRS Division produces numerous reports on important topics in science, engineering, and technology. The following are examples of widely referenced SRS publication series:

- *Science and Engineering Indicators*
- *Women, Minorities, and Persons with Disabilities in Science and Engineering*
- *National Patterns of R&D Resources*
- *Science and Engineering Research Facilities*
- *Science and Engineering Doctorate Awards*

Also available are special reports and data and issue briefs on topics related to the science, engineering, and technology enterprise. Data products such as microdata files are made available to the research community. To help acquaint customers with SRS products and databases, the division has an extensive web site presenting its full collection of reports, public-use microfiles, and online data systems.

For More Information

Visit the SRS home page, <http://www.nsf.gov/sbe/srs/>; or contact the division by telephone, 703-292-8774.

DIVISION OF INTERNATIONAL PROGRAMS

Research and education in science and engineering benefit immensely from international cooperation. The Division of International Programs (INT) enables and

encourages U.S. scientists, engineers, and their institutions to avail themselves of opportunities to enhance their research and education programs through international cooperation. NSF also provides opportunities for future generations of U.S. scientists and engineers to gain the experience and outlook they will need to function productively in an international research and education environment.

Submission of Proposals to the INT Division

The INT Division works closely with the disciplinary research divisions of NSF. Depending on the circumstance, a proposal may be submitted to INT or to the appropriate disciplinary division, or supplements to existing grants may be requested. Principal investigators who are considering applying for an INT supplement should discuss the scope and timeframe of their proposed activity with both the cognizant program manager in the disciplinary research division and the appropriate (normally, geographically based) program manager in INT.

The INT Division typically supports the travel and incremental international living costs of the U.S. participants in the activity. Further information such as special considerations and funding provisions for certain geographical regions or countries can be found on the INT Division home page, <http://www.nsf.gov/sbe/int/start.htm>, and in the program announcement *International Opportunities for Scientists and Engineers* (NSF 00-138).

Eligibility Requirements for the INT Division

Proposals from U.S. scientists and engineers for international activities are eligible for consideration in all fields of science and engineering supported by NSF.

Normally a proposal must be submitted by a U.S. institution, with the exception of International Research Fellow awards and the Japan and Korea Summer Programs, which accept applications from individuals who are U.S. citizens or permanent residents. Proposals submitted to the INT Division normally compete in one of five regional groupings. Proposals for International Research Fellow awards are in a separate competition.

For More Information

Contact the relevant program office listed below or write to the Division of International Programs, National Science Foundation, 4201 Wilson Boulevard, Room 935, Arlington, VA 22230; or contact the division by telephone, 800-437-7408, or by e-mail, intpubs@nsf.gov. Information is also available on the INT home page, <http://www.nsf.gov/sbe/int/start.htm>.

**International Research Fellow Awards
(worldwide)
703-292-8711**

**Africa, Near East, and South Asia
703-292-8707**

**The Americas
703-292-8706**

**Central and Eastern Europe
703-292-8703**

**East Asia and the Pacific
703-292-8704**

**Western Europe
703-292-8702**